$NHCH_2CH_2OCH_2CH_2OCH_2CO_2H$ (IV).

However, as the man skilled in the art will easily realise, variations may be made to these sequences while still providing an advantageous synthetic transport entity within the scope of the present invention as defined by the appended claims. Using the present invention, it is possible to mimic the different functions of viruses and microorganisms by attaching functions directly to a nucleic acid or any other biological molecule and/or complex to be transferred to a cell. At the same time, deleterious properties of native viral vectors are avoided by the use of the present transfer entity.--

Please replace the paragraph beginning on page 21, line 28, with the following rewritten paragraph:

--The peptide nucleic acid (PNA) was synthesised at Perspective BioSynthesis Ltd. The sequence of the PNA was chosen with the criteria of being excluded from the plasmids as well as from known eucaryotic DNA sequences to avoid possible non-specific binding. The PNA peptides were attached with the hydrophobic spacer Fmoc-$NC_6O_3H_{11}$-OH (Fmoc-AEEA-OH) to a stretch of amino acid residues, PKKKRKV (SEQ ID NO:2), the SV40 core NLS. The complete sequence is GCGCTCGGCCCTTCC (SEQ ID NO:3)-linker-PKKKRKV (SEQ ID NO:2). Like peptides, PNA is synthesized on a polyethylene glycol-polystyren (PEG-PS) support with a peptide amide linker, the linker yielding a PNA amide upon cleavage of the final product (http://www.pbio.com/cat/synth/pna/pnacycle.htm).--

Please replace the paragraph beginning on page 26, line 2, with the following rewritten paragraph:

--The present invention demonstrates that a PNA molecule linked to an SV40 NLS peptide can work as a nuclear targeting signal when hybridised to a fluorescent labelled oligonucleotide or to a plasmid containing a reporter gene. Similar results were obtained using DOTAP or 25 kD PEI as transfection reagents in HeLa, NIH- 3T3 or COS- 7 cells, demonstrating the versatility of the technique (data not shown). The method according to the invention is of potential value for transfections in general and may also be applied in the context of gene therapy or DNA-vaccination. The increased uptake of nucleic acids into target cells may be vital for gene expression, as well as for the delivery of anti-sense constructs or mutation-inducing oligonucleotides. In the context of anti-sense activity it should also be possible to apply a PNA-NLS construct alone. According to the present invention, a PNA target sequence, CGCGAGCCGGGAAGG (SEQ ID NO:4), was used, which does not exist in the unmodified EGFP or the lacZ plasmids that were studied. The interaction of PNA with its target sequence is highly specific and the PNA does not cross-hybridise to non-related sequences. The strong interaction between DNA and PNA also prevents the compex from dissociating (Knudsen H., Nielsen P .E.: Antisense properties of duplex- and triplex-forming PNAs, Nucleic Acids Research 24(3) 494-500 (1996)).--

Please insert the attached Sequence Listing, independently numbered pages 1-7, directly after the abstract.